

5/22/2018

Print



Dart Hawkesbury
1270 Aberdeen St Hawkesbury, ON K6A 1K7 Canada
Tel (613) 632-5200

Purchasing Receipts

PO No	Supplier	Line Item No	Rel No	Terms	Purchased Item	Description	For Part No	Project	Equipment ID	Order Qty	Due Date	Received Quantity	Accounting Job No	Container No	Status	Receive Date	Price/Unit	Aging Days	Past Due	To
PO039829	THY001-VC	1	1	Net 30	MT-BRONZE-C63000-R2.500	Bronze C63000 Round Bar 2.500" : MATL AS PER BRONZE C63000 AS PER ANS 4640 OR ASME SB150 OR ASTM B150 OR SAE J461 OR SAE J463				2	5/22/2018	2		S072875	Stock	5/22/2018	\$ 172.50 / ft	0		\$34
Total:										2		2								\$271

Plex 5/22/2018 8:30 AM Dart.Dubois.Pascal



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tei (613) 632-5200

PURCHASE ORDER **PO039829**

Supplier: THY001-VC
Thyssenkrupp Materials CA Ltd
O/A VPK Metal- c/o T27540
PO Box 4275, Postal"A"
Toronto
ON
M5W 5V8 Canada
Phone: 905 669 9444
Fax: 905 738 9033

PO No: PO039829
PO Date: 5/8/18
Due Date: 5/22/18
Purchase Order
Revision:
Revision Date:
Ship-To Contact: Lavoie, Chantal
clavoie@dartaero.com

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Ground
Pynt Terms: Net 30
Freight Terms:
Special Comments: quote no. 1203109433

Items

Line Item	Part	Supplier Part No	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	MT-BRONZE- C63000-R2.500	1 ft length	Bronze C63000 Round Bar 2.500" : MAT'L AS PER BRONZE C63000 AS PER ANS 4640 OR ASME SB150 OR ASTM B150 OR SAE J461 OR SAE J463	Firmed	5/22/18	2 ft	0 ft	2 ft	\$172.50/ft	\$345.00
							2'			
										DAS 11 9-89 MAY 22 2018
2	M17-4- B0.500X2.000		17-4 SS Bar .500 x 2.00 : MATERIAL: 17-4 PH SS BAR AS PER AMS 5604/5643 GRAIN MUST BE ALONG LENGHT OF BAR MIN. YIELD TENSILE STRENGTH = 100 KSI MIN. ULTIMATE TENSILE STRENGTH = 150 KSI receive ft	Firmed	5/22/18	12 ft	0 ft	12 ft	\$19.32/ft	\$231.84
							13			
3	M304R0.625		304 SS Round bar 0.625 : MATERIAL: AISI 304/316 SS ROUND BAR AS PER ASTM A276 NOTE: AISI 303 NOT ACCEPTABLE receive ft	Firmed	5/11/18	12 ft	0 ft	12 ft	\$7.08333/ft	\$85.00
							12			

5/8/2018

PURCHASE ORDER

Items										
Line Item	Part	Supplier Part No	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
4	M6061T6R7.000		6061-T6 Round Bar 7.000" (CUT TO SIZE: 7.125") : MATERIAL: 6061- T6/T651/T6510/T6511/T62 ALUMINUM ROUND BAR AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117 4128/4115/4116 OR QQ- AA-200/8 OR AMS-QQ-A- 200/8 OR AMS 4160 OR ASTM B221 OR ASTM B221 receive ft	Firmed	5/22/18	2.969 ft	0 ft	3 ft	\$148.21052/ft	\$440.04
Line Item Note note; cut to 7.125" x 5 pcs = 2.96875 ft										
										Grand Total: \$1,101.88

Order Notes

Procurement Quality Clauses

A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)
A026 certification of material conformance
A041 quality management system
A042 dart notification by supplier
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.carterspace.com for further explanation.

Plex 5/8/18 11:44 AM dart.lavoie.chantal



Arr

thyssenkrupp Materials NA, 4700 chemin du Bois-Franc, Saint-Laurent, QC H4S 1A7

DELIVERY NOTE

DART AEROSPACE LTD
1270 ABERDEEN ST
HAWKESBURY ON K6A 1K7



DATE: 05/22/2018
DOC. NO: 2405966158*
BOL. NO: 2405966158
ORDER NO: 1403639010
YOUR P/O: PO039829
CUSTOMER NO: 10058125
Route: 303UA
CONTACT: Lucy Truglio
TEL:
FAX:
EMAIL: lucy.truglio@thyssenkrupp.com

IBARZ

MTR

MILL TEST REPORTS, PACKING SLIPS ARE TO SENT
WITH MATERIAL AND FAXED TO THE CUSTOMER PRIOR
TO SHIPPING.

ATTN: CHANTAL/LINDA

** ALL PACKING SLIPS MUST HAVE THE HEAT NUMBER **
** REFERENCED ON IT **

Deliveries are carried out for your account and risk acc. to our Gen. Terms & Cond. of Delivery and Payment.

ITEM	DESCRIPTION	NET QTY1 / QTY2	PACKAG
0010	AMS4640, ASTM B150 CURD00449 Aluminum Bronze C63000 HR50 (drawn & stress relieved) Round 2.5000 (+-.005) X 24 " RBW Cutting - Standard +.125 Cut To Length 24.0000 " 1 Actual Chemistry/Act. Physical Standard Packaging MATERIAL ORIGIN: UK OR FRANCE	1008612692 1 PC 31.348 lb	

AMS4640, ASTM B150

TAGNUM	QTY	UOMVEND	VENDPO	HLOT	PCS	---	COM
1013850427	1	PC	LEBRONZE	5400358448	603275	1	

SAE AMS 4640|H;ROHS COMPLIANT;ASTM B 150/B 150M|2012

Total Gross Weight

31.348 lb

All items, not declared as partial delivery, are final quantities.
Delivery Terms: PPD gem. Incoterms 2000 Prepaid PREPAID

thyssenkrupp Materials NA, 4700 chemin du Bois-Franc, Saint-Laurent, QC H4S 1A7

DELIVERY NOTE

DART AEROSPACE LTD
1270 ABERDEEN ST
HAWKESBURY ON K6A 1K7

DATE:	05/22/2018
DOC. NO:	2405966158*
BOL. NO:	2405966158
ORDER NO:	1403639010
YOUR P/O:	PO039829
CUSTOMER NO:	10058125
Route:	303UA
CONTACT:	Lucy Truglio
TEL:	
FAX:	
EMAIL:	lucy.truglio@thyssenkrupp.com

CERTIFICAT DE CONFORMITÉ/CERTIFICATE OF COMPLIANCE

*thyssenkrupp Matériaux NA certifie que le matériel décrit ci-dessus est conforme aux dessins ou spécifications exigés sur le bon de commande et qui sont en vigueur à la date où la commande a été acceptée./ thyssenkrupp Materials NA certifies that the material described above is in accordance with the drawings or specifications called for on said order that are current on the date order was accepted.

*Nous certifions que le document reproduit ici est une copie conforme du rapport fourni par le fournisseur du matériel où les données résultent de l'analyse faite par un laboratoire qualifié/ We certify that the document reproduced here is true to the report provided by the equipment supplier where the data are the result of analysis by a qualified laboratory.

David Nuordine - Director of Quality Assurance



Printed 25/09/17

Purchaser
THYSSENKRUPP MATERIALS NA
PO Box 5116

Delivery address
THYSSENKRUPP MATERIALS NA
CBS NORTHWOOD
8001 THYSSENKRUPP PARKWAY
NORTHWOOD
OH

MI 408086-5116 SOUTHFIELD USA

Y/Ord 5400358448-R05/CURD00449
C/Crd 1632702/008 of 12/07/17

Y/Ord date 12/07/17
Delivery n° 3633405/0180548.11/COCBSN
Deliv. date 31/07/17

BI Reference 2,500" X 144" M/L ROUND BAR
663000-HR50-FIXLG-63,50 * 0,000 LG:2 /3.658,
BARRE RONDE NC

Standard ASTMB150ASMESB150AMS4640QQC465
Alloy UNS C63000
Condition HR50 FIXED LENGTHS

Ordered qty 5467,316 LB Delivered qty 2008,810 LB Net weight 912,000 KG

Chemical analysis - if Cu not mentioned: balance

Component.	Cu+Ag	Cu	Al	Ni+Co	Ni	Fe	Mn	Zn	Si
	%	%	%	%	%	%	%	%	%
Minimum...	77,25	77,25	9,0	4,0	4,0	2,0			
Maximum...	85,00	85,00	11,0	5,5	5,5	4,0	1,50	0,300	0,25
Record -1-	80,44	80,44	10,4	4,6	4,6	3,6	0,66	0,100	0,07
Component.	Sn								
	%								
Minimum...									
Maximum...	0,200								
Record -1-	0,001								

Mechanical tests

Test	Tensile strength	Elongation 4D	Hardness Brinell 30D2	Yield strength 0,5% EUL
Unit	ksi	%	HB	ksi
Minimum	105,0	10,0	187,0	55,0
Maximum			241,0	
Test -1-	116,5	12,4	222,0	60,1

Other tests

HEAT Number : 603275

Visual

Dimensional

Mercurous Nitrate Test

Ultrasonic

ASTMB154
MIL2154/A

Properties conform

ASTMB150/150M (03) (08) (12) (HR50)

Validated by Jean philippe GONNET
Quality control inspector
Validated with electronic signature

From: TK Materials CA, Ltd.

Cust. DART AEROSPACE LTD

CstAr

Wgt.: 31.348 LB

Del.: 2405966158

CstOr PO039829

Date 05/16/2018

lebronze alloys

INSPECTION CERTIFICATE
EN 10204 3.1
Number 0000409217/000
Page 2 / 2
Lot n° 1707708397

Printed 25/09/17

Purchaser
THYSSENKRUPP MATERIALS NA
PO Box 5116

Delivery address
THYSSENKRUPP MATERIALS NA
CBS NORTHWOOD
8001 THYSSENKRUPP PARKWAY
NORTHWOOD
OH

MI 408086-5116 SOUTHFIELD USA

Y/Ord 5400358448-R05/CURD00449
O/Ord 1632702/006 of 12/07/17

Y/Ord date 12/07/17
Delivery n° 3633405/0190549.11/COCBSN
Deliv. date 31/07/17

SI Reference 2,500" X 144" M/L ROUND BAR
C63000-HR50-FIXLG-63,50 * 0,000 LG:2 /3.658,
BARRE RONDE NC4

Standard ASTMB150ASMESB150AMS4640QQC465
Alloy UNS C63000
Condition HR50 FIXED LENGTHS

Ordered qty 5467,316 LB Delivered qty 2008,810 LB Net weight 912,000 KG
ASMESB150 (06) (HR50)
AMS4640 G (05) / AMS4640 H (11)
QQC465B AMD 1 (83)

Chemical composition conforms to ASTMB124/B124M (12)
Ultrasonic test in accordance with mil2154 / AMS2154 (2005)
class A and ASTM E2375-06 class A
Mercurous Nitrate test in accordance with ASTMB154 : ok

This material did not come in direct contact with mercury or
any of its compounds during its manufacturing, inspection or
storage.

Melted and manufacturing in FRANCE.

Chemical analysis and mechanical properties in conformity
with EN12163 /CW307G / R680 or M and ASTMB124

No weld repair was performed on this material
The results of the other tests and the frequency are
conformable with the norm in reference. This material
has been manufactured and tested in accordance with
the listed specifications and results conform to
the specification and order requirements.

LEBRONZE ALLOYS
SIEGE SOCIAL-ZI VOIE DE CHALONS-RD 977-51600 SUIPPES-FRANCE
TEL:+33(0)3 26 69 28 28 www.lebronze-alloys.com
RCS Chalons en Champagne 572 196 129 - TVA UE FR60 572 196

Validated by Jean philippe GONNET
Quality control inspector
Validated with electronic signature



Siege social : ZI Voie de Chalons - RD 977 - 51600 Suippes - France - Tel +33 (0)3 26 69 28 28 - Fax +33 (0)3 26 70 16 82 - www.lebronze-alloys.com
SAS au capital de 12.457.353 Euros - RCS Chalons en Champagne 572 196 129 - TVA UE FR60 572 196 129

From: TK Materials CA, Ltd.

Cust. DART AEROSPACE LTD

CstAr

Wgt.: 31.348 LB

Del.: 2405966158

CstOr PO039829

Date 05/16/2018



MATERIAL RECEIPT INSPECTION FORM

MATERIAL: Mt-Bronze-C63000-R2.500 PO / BATCH NO.: 039829/5072875
 DATE: MAY 22 2018

MATERIAL CERT REC'D: yes
 QUANTITY RECEIVED: 2'
 QUANTITY INSPECTED: 2'
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 2.500
 THICKNESS RECEIVED: 2.500
 SHEET SIZE ORDERED: N/A
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y (N)	
CORRECT FINISH	(Y) N	
CORROSION	Y (N)	
CORRECT GRAIN DIRECTION	(Y) N	
CORRECT MATERIAL PER M-DRAWING	(Y) N	<u>Astm B150</u>
CORRECT THICKNESS	(Y) N	
PHOTO REQUIRED	Y (N)	
CORRECT REF # TO LINK CERT	(Y) N	<u>Heat # 603275</u>
CORRECT MATERIAL IDENTIFICATION	(Y) N	
CORRECT M# ON THE MATERIAL	(Y) N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y (N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y (N)	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: <u>DAS</u>	SIGNED OFF BY: _____		
DATE: <u>11</u> <u>9-89</u> <u>MAY 22 2018</u>	DATE: _____		


Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

8	7	6	5	4	3	2	1
REV.		DESCRIPTION		ECN #		DATE	
A		NEW ISSUE		17-787		17.12.12	
						VM	
						ML	

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL:
 SPECIFICATION:
 PART NUMBER:
 EXAMPLE:

BRONZE C63000
 AMS 4640 OR ASME SB150 OR ASTM B150 OR SAE J461 OR SAE J463
 MT-BRONZE-C63000-R-[D.DDD]
 WHERE D.DDD IS DIAMETER IN INCHES
 1/4" ROUND BRONZE C63000 = MT-BRONZE-C63000-R-0.250

 DART AEROSPACE Hemelburg, Ontario, Canada	
TITLE BRONZE C63000 ROUND BAR	
PART NO. MT-BRONZE-C63000-R	REV. A
TOOL NO.	
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES DIMENSIONS IN PARENTHESES ARE IN MILLIMETERS DIMENSIONS ARE TO BE MAINTAINED	
DESIGNED BY: VM 12/12/2017	INITIALS AND DATE VM 12/12/2017
DRAWN BY: VM 12/12/2017	NO. OF PARTS: XX 2.00
CHECKED BY: ML 12/12/2017	FRACTIONS: ± 1/8 ANGLES: ± .5° ROUGHNESS: R 1.1
INFO REVIEW BY: DF 12/12/2017	SCALE: NTS
APPROVED BY: ML 12/12/2017	SHEET 1 OF 1
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